

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated May 17, 2005 has been received and its contents carefully reviewed.

Claims 1, 5, 14, 15 and 17 are hereby amended. Claims 28 and 29 are withdrawn from consideration. Claims 1–29 are pending. Reexamination and reconsideration of the pending claims are respectfully requested.

In the Office Action, claims 28 and 29 are withdrawn from consideration as being directed to a non-elected invention. Claims 1-22 and 24-27 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,790,222 to Kim (hereinafter “Kim ‘222”). Claim 23 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim ‘222 in view of U.S. Patent No. 6,100,953 to Kim (hereinafter “Kim ‘953”).

The constructive election of claims 1-27 and the withdrawal of claims 28 and 29 from consideration on the merits are respectfully traversed and reconsideration is requested.

The Examiner states at page 2 of the Final Office Action that claims 1-27 have been constructively elected by original presentation and that claims 28 and 29 are withdrawn from consideration as being drawn to a patentably distinct species. However, Applicant respectfully asserts that no undue burden would be placed upon the Examiner if both species of the claimed invention were simultaneously examined. Furthermore, Applicant respectfully asserts that a search for the LCD device of claims 1-27 would, based on the requirement that a complete and thorough search be performed by the Examiner, inherently include a search within the Class/Subclass containing art directed toward the LCD device of claims 28 and 29. Accordingly, Applicant respectfully submits that no undue burden would be placed upon the Examiner if the inventions of both species were examined at the same time. Therefore, Applicant respectfully requests withdrawal of the species election and formal examination of claims 28 and 29.

The rejection of claims 1-22 and 24-27 as being anticipated by Kim '222 is respectfully traversed and reconsideration is requested.

Claim 1 is allowable over Kim '222 in that claim 1 recites a combination of elements including, for example, "an active layer disposed below the second data line, a source electrode, and a drain electrode of the thin film transistor, wherein the second data line completely overlaps the active layer." Kim '222 does not teach at least these features of the claimed invention. The Examiner states, at page 9 of the Final Office Action, that "the active layer (45) is disposed under the source (47) and drain electrodes (48). Therefore, since the second data line (49) and the source are essentially part of the same layer, the active layer is also under the second data line." However, the structure of claim 1 of the present application is different from the structure of Kim '222 in that "the second data line completely overlaps the active layer." In contrast, Kim '222 merely teaches that layer 49 only partially overlaps layer 45. Kim teaches amorphous silicon layer 45 is exposed at its center and data bus line 49 is formed at a side of amorphous silicon layer 45. Column 3, lines 30-40, Figure 5. Accordingly, because Kim '222 fails to teach these features of claim 1, Applicant respectfully submits that claim 1 and claims 2-14, which depend therefrom, are allowable over Kim '222.

Claim 15 is allowable over Kim '222 in that claim 15 recites a combination of elements including, for example, "forming a second data line on the same layer as the first data line and perpendicular to the gate line by patterning the semiconductor layer and the conductive layer, the second data line having source/drain electrodes extended therefrom, wherein the second data line completely overlaps the semiconductor layer." Kim '222 does not teach at least these features of the claimed invention. The Examiner states, at page 9 of the Final Office Action, that "the active layer (45) is disposed under the source (47) and drain electrodes (48). Therefore, since the second data line (49) and the source are essentially part of the same layer, the active layer is also under the second data line." However, the method of claim 15 of the present application is different from Kim '222 in that "the second data line completely overlaps the semiconductor layer." In contrast, Kim '222 merely teaches that layer 49 only partially overlaps layer 45. Kim teaches amorphous silicon layer 45 is exposed at its center and data bus line 49 is formed at a side of amorphous silicon layer 45. Column 3, lines 30-40, Figure 5.

Accordingly, because Kim '222 fails to teach these features of claim 15, Applicant respectfully submits that claim 15 and claims 16-27, which depend therefrom, are allowable over Kim '222.

The rejection of claim 23 as being unpatentable over Kim '222 in view of Kim '953 is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Kim '953 fails to cure the aforementioned defects associated with the teachings of Kim '222. None of the cited references, singly or in combination, teaches or suggests "forming a second data line on the same layer as the first data line and perpendicular to the gate line by patterning the semiconductor layer and the conductive layer, the second data line having source/drain electrodes extended therefrom, wherein the second data line completely overlaps the semiconductor layer," as recited in independent claim 15. In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. Applicant further respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible. For at least this reason, claim 23, which depends from claim 15, is allowable over the cited references.

Applicant believes the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

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The undersigned hereby signs this filing under the authority provided by 37 C.F.R. §1.34 pending the filing of a Power of Attorney and Statement under 3.73(b) executed by Assignee.

Dated: September 15, 2005

Respectfully submitted,

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